BBA

Molecular Cell Research
including Hormone and
Neurotransmitter Action
Vol. 1091, 1991

Cumulative Contents

Information for Contributors ix

Regular Section

Regular Papers

Rat intestinal alkaline phosphatase secretion into lumen and serum is coordinately regulated
R. Eliakim, A. Mahmood and D.H. Alpers (U.S.A.) 1

Excitation and detection of action potential-induced fluorescence changes through a single monomode optical fiber
T.A. Bowmaster, C.C. Davis and V. Krauthamer (U.S.A.) 9

Release of a membrane surface glycoprotein from human platelets by phosphatidylinositol specific phospholipase(s) C
A. Dhar and S.D. Shukla (U.S.A.) 15

Deoxyadenosine-resistant human T lymphoblasts with elevated 5′-nucleotidase activity
D.A. Carson, C.J. Carrera, D.B. Wasson and T. Iizasa (U.S.A., Japan) 22

Determination of the osmotic active drug concentration in the cytoplasm of anthracycline-resistant and -sensitive K_{562} cells
F. Frezard and A. Garnier-Suillerot (France) 29

Hyaluronan-binding proteins on cultured J 774 macrophages
S. Gustafson and N. Forsberg (Sweden) 36

The effect of bile salts on human vascular endothelial cells
C.M. Garner, C.O. Mills, E. Elias and J.M. Neuberger (U.K.) 41

Reduction of mono(ADP-ribosyl)ation of 20 kDa protein with maturation in rat testis: Involvement of guanine nucleotides
A. Yamashita, E. Sato, H. Yasuda, T. Kurokawa and S. Ishibashi (Japan) 46

ADP-ribosylation in *Clostridium difficile* toxin-treated cells is not related to cytopathogenicity of toxin B
I. Florin and M. Thelestam (Sweden) 51

Δ^5-3β-Hydroxysteroid dehydrogenase-isomerase activity in two distinct density Leydig cells from immature rats. Differences in responsiveness to human chorionic gonadotropin or 8-bromoadenosine 3′,5′-monophosphate
E.P. Murono and A.L. Washburn (U.S.A.) 55

Receptors for modified low-density lipoproteins on human endothelial cells: Different recognition for acetylated low-density lipoprotein and oxidized low-density lipoprotein
N. Kume, H. Arai. C. Kawai and T. Kita (Japan) 63

Subsection

Mini-Review

Regulation of calcium channel activity by GTP binding proteins and second messengers
A.C. Dolphin (U.K.) 68

Regular Papers

The 38 kDa Ca^{2+}/membrane-binding protein of pig granulocytes needs a high Ca^{2+} concentration to be phosphorylated by protein kinase C
G. Farkas, L. Buday, F. Antoni and A. Faragó (Hungary) 81

Prostaglandin E_2 induction of monoblastic differentiation utilizes both cAMP and non-cAMP dependent signalling systems
J.E. Rubin, L. Titus and M.S. Nanes (U.S.A.) 87

Glucocorticoids inhibit fructose 2,6-bisphosphate synthesis in rat thymocytes. Opposite effect of cycloheximide
V.R. Moreno-Aurioles and F. Sobrino (Spain) 96

Activation of human monocyte-derived macrophages by interferon γ is accompanied by increase polymerase activity of poly(ADP-ribose)
G. Berton, C. Sorio, C. Laudanna, M. Menegazzi, A. Carcereri De Prati and H. Suzuki (Italy) 101

Thimerosal induces calcium mobilization, fructose 2,6-bisphosphate synthesis and cytoplasmic alkalinization in rat thymus lymphocytes
F. Martín, A. Gualberto, F. Sobrino and E. Pintado (Spain) 110

Potentiation of arachidonic acid release by phorbol myristate acetate in platelets is not due to inhibition of arachidonic acid uptake or incorporation into phospholipids
H.S. Banga, S.P. Halenda and M.B. Feinstein (U.S.A.) 115

Reports

Activation of protein kinase C is essential for sustained insulin secretion in response to cholinergic stimulation
S.J. Persaud, P.M. Jones and S.L. Howell (U.K.) 120

Stimulation by NaCl, polylysine and heparin of two forms of spleen tyrosine protein kinase immunologically related with the protein expressed by *lyn* oncogene
A.M. Brunati, A. Donella-Deana, S. Ralph, F. Marchiori, G. Borin, S. Fischer and L.A. Pinna (Australia, Italy, France) 123

Regular Section

Regular Papers

Reconstitution of the skeletal sarcoplasmic reticulum Ca^{2+}-pump: influence of negatively charged phospholipids
G. Szymańska, H.W. Kim and E.G. Kranias (U.S.A.) 127

An FM3A mutant, G258, with a mutation that affects both cell growth and oligosaccharide-lipid synthesis
Y. Nishikawa (Japan) 135

Studies of the mechanism of activation of HIT-T15 cells by lactate
A.M. Lynch, R. Trebilcock, S. Tomlinson and L. Best (U.K.) 141

Volume regulation in mouse pancreatic β-cells is mediated by a furosemide-sensitive mechanism
K.G. Engström, P.-E. Sandström and J. Sehlin (Sweden) 145

Metabolic and secretory response of parotid cells to cationic amino acids. Uptake and catabolism of L-arginine and L-ornithine
F. Blachier, A. Mourtada, R. Gomis, A. Sener and W.J. Malaisse (Belgium) 151

Changes in inositol transport during DMSO-induced differentiation of HL60 cells towards neutrophils
M.A. Baxter, C.M. Bunce, J.M. Lord, P.J. French, R.H. Michell and G. Brown (U.K.) 158

Flow cytometric characterization and sorting of cultured *Brassica napus* microspores
C. Deslauriers, A.D. Powell, K. Fuchs and K.P. Pauls (Canada) 165

Cytotoxic effect and uptake mechanism by isolated rat hepatocytes of lithocholate and its glucuronide and sulfate
H. Takikawa, J. Tomita, T. Takemura and M. Yamanaka (Japan) 173

An NMR spectroscopic characterization of a new epithelial cell line, TALH-SVE, with properties of the renal medullary thick ascending limb of Henle's loop
I.R. Von Recklinghausen, D.M. Scott and A.W.H. Jans (F.R.G.) 179

Biological activity of 1α,25-dihydroxyvitamin D derivatives – 24-*epi*-1α,25-dihydroxyvitamin D–2 and 1α,25-dihydroxyvitamin D–7
F. Sato, Y. Okamoto, Y. Ouchi, M. Kaneki, T. Nakamura, N. Ikekawa and H. Orimo (Japan) 188

Report

Effect of epidermal growth factor (EGF) on gluconeogenesis in isolated rat hepatocytes. Dependency on the red-ox state of the substrate
C. Soler, B. Poveda, M. Pastor-Anglada and M. Soley (Spain) 193

Subsection

Regular Papers

Reaction of α_2-macroglobulin with plasmin increases binding of transforming growth factors-β1 and β2
J. LaMarre, G.K. Wollenberg, S.L. Gonias and M.A. Hayes (Canada, U.S.A.) 197

Calmodulin-dependent protein kinase II. Kinetic studies on the interaction with substrates and calmodulin
T. Katoh and H. Fujisawa (Japan) 205

Apparent activation of rabbit lung membrane adenylate cyclase by cytosolic proteins possessing adenylate kinase activity
E.V. Nupenko, M.P. Panchenko, M.G. Starikova, A.V. Grishin and V.A. Tkachuk (U.S.S.R.) 213

Phosphorylase kinase from bovine stomach smooth muscle: a Ca^{2+}-dependent protein kinase associated with an actin-like molecule
V.G. Zevgolis, T.G. Sotiroudis and A.E. Evangelopoulos (Greece) 222

The effect of transforming growth factor β on rates of procollagen synthesis and degradation in vitro
R.J. McAnulty, J.S. Campa, A.D. Cambrey and G.J. Laurent (U.K.) 231

Two major antigens of heart sarcolemma are Ca^{2+}-binding glycoproteins that copurify with the dihydropyridine receptor
B.S. Tuana, R.K. Sunahara, B.J. Murphy and G.N. Pierce (Canada) 236

Changes in intracellular free calcium activity in *Xenopus* eggs following imposed intracellular pH changes using weak acids and weak bases
N. Grandin and M. Charbonneau (France) 242

Report

Secretagogue-induced Ca^{2+} oscillations in isolated canine gastric chief cells
Y. Tsunoda, J.A. Williams and J. DelValle (U.S.A.) 251

Regular Section

Regular Papers

The role of adhesive interactions and extracellular matrix fibronectin from human polymorphonuclear leukocytes in the respiratory burst
G.F. Sud'ina, A.V. Tatarintsev, A.A. Koshkin, S.V. Zaitsev, N.A. Fedorov and S.D. Varfolomeev (U.S.S.R.) 257

Role of ABH blood group antigens in the stimulation of a DIDS-sensitive Ca^{2+} influx pathway in human erythrocytes by *Ulex europaeus* agglutinin I and a monoclonal anti A_1 antibody
B. Engelmann, U. Schumacher and J. Duhm (F.R.G.) 261

The isolated neonatal rat-cardiomyocyte used in an in vitro model for 'ischemia'. I. A morphological study
R.J.P. Musters, J.A. Post and A.J. Verkleij (The Netherlands, U.S.A.) 270

The isolated neonatal rat-cardiomyocyte used in an in vitro model for 'ischemia'. II. Induction of the 68 kDa heat shock protein
M.J.M. Tuijl, P.M.P. Van Bergen en Henegouwen, R. Van Wijk and A.J. Verkleij (The Netherlands) 278

Cell damage caused by ATP depletion is reduced by magnesium and nickel in human fibroblasts – a non-specific calcium antagonism?
S.R. Kristensen (Denmark) 285

The release of iron and transferrin from the human melanoma cell
D.R. Richardson and E. Baker (Australia) 294

Characterization of cultured alveolar epithelial cell xanthine dehydrogenase/oxidase
P.C. Panus, B. Burgess and B.A. Freeman (U.S.A.) 303

Stimulation of lipid peroxidation increases the intracellular calcium content of isolated hepatocytes
E. Albano, G. Bellomo, M. Parola, R. Carini and M.U. Dianzani (Italy) 310

Fluorescence response in chlortetracycline-loaded neutrophils measures release of Ca^{2+} from intracellular membrane enclosed storage sites
J. Jacob (India) 317

Iodoacetate action on endocytic uptake of different fluid-phase markers by OK renal epithelial cells
S.A. Kempson, K.J. Kunkler and H. Murer (U.S.A., Switzerland) 324

Platelet activating factors (AGEPC) from epidermal secretions of the Arabian Gulf catfish, *Arius bilineatus*, which stimulate wound healing
B. Summers, J.M. Al-Hassan, M. Thomson, A. Chun and R.S. Criddle (Kuwait, U.S.A.) 329

Hepatocellular uptake of peptides by bile acid transporters: relationship of carrier-mediated transport of linear peptides with renin-inhibiting activity to multispecific bile acid carriers
A. Bertrams and K. Ziegler (F.R.G.) 337

^{31}P-NMR-studies on intracellular pH and metabolite concentrations in relation to the circadian rhythm, temperature and nutrition in *Neurospora crassa*
U. Pilatus and D. Techel (F.R.G.) 349

Subsection

Regular Papers

Priming effect of glucagon-like peptide-1 (7-36) amide, glucose-dependent insulinotropic polypeptide and cholecystokinin-8 at the isolated perfused rat pancreas
H.-C. Fehmann, R. Göke, B. Göke, R. Bächle, B. Wagner and R. Arnold (F.R.G., U.S.A.) 356

Autocrine control of adipose cell differentiation by prostacyclin and $PGF_{2\alpha}$
R.-M. Catalioto, D. Gaillard, J. Maclouf, G. Ailhaud and R. Negrel (France) 364

Identification of the calmodulin-regulated protein phosphatase, calcineurin, in rat pancreatic islets
J.J. Gagliardino, M.H. Krinks and E.E. Gagliardino (Argentina, U.S.A.) 370

Tumor necrosis factor-α stimulates phosphatidylinositol breakdown by phospholipase C to coordinately increase the levels of diacylglycerol, free arachidonic acid and prostaglandins in an osteoblast (MC3T3-E1) cell line
B.E. Rapuano and R.S. Bockman (U.S.A.) 374

Arachidonic acid release by basophilic leukemia cells and macrophages stimulated by Ca^{2+} ionophores, antigen and diacylglycerol: essential role for protein kinase C and prevention by glucocorticosteroids
U. Zor, E. Her, T. Harell, G. Fischer, Z. Naor, P. Braquet, E. Ferber and N. Reiss (Israel, France, F.R.G.) 385

In vitro phosphorylation and inactivation of spinach leaf sucrose-phosphate synthase by an endogenous protein kinase
S.C. Huber and J.L. Huber (U.S.A.) 393

Volatile anesthetics stimulate the phorbol ester evoked neurotransmitter release from PC12 cells

through an increase of the cytoplasmic Ca^{2+} ion concentration
P.W.L. Tas and K. Koschel (F.R.G.) 401

Tumor necrosis factor (TNF) inhibits interleukin (IL)-1 and/or IL-6 stimulated synthesis of C-reactive protein (CRP) and serum amyloid A (SAA) in primary cultures of human hepatocytes
S.H. Yap, H.J. Moshage, B.P.C. Hazenberg, H.M.J. Roelofs, J. Bijzet, P.C. Limburg, L.A. Aarden and M.H. Van Rijswijk (Belgium, The Netherlands) 405

Interactions between inositol phosphates and cytosolic free calcium following bradykinin stimulation in cultured human skin fibroblasts
H.-M. Huang, L. Toral-Barza and G.E. Gibson (U.S.A.) 409

Osmotic strength differentiates between two types of calcium transport pathways regulating catecholamine secretion from cultured bovine chromaffin cells
E. Heldman, M. Levine, K. Morita and H.B. Pollard (U.S.A.) 417

Further definition of the substrate specificity of the alpha-herpesvirus protein kinase and comparison with protein kinases A and C
D.P. Leader, A.D. Deana, F. Marchiori, F.C. Purves and L.A. Pinna (U.K., Italy) 426

Effect of pentosan polysulphate, standard heparin and related compounds on protein kinase C activity
J.-M. Herbert and J.-P. Maffrand (France) 432

Author Index 443

Cumulative Contents, Vol. 1091 447